WHAT IS CLAIMED IS:

1. A cell search method wherein a station detects a correlation value between an input signal and a spreading code generated by the station itself, and detects a correlation peak value in a predetermined unit of slots, and

a threshold value is provided to be compared with the detected correlation value.

2. A method according to claim 1, wherein a correlation value exceeding said threshold value is stored in a memory.

3. A method according to claim 2, wherein timing data on the timing at which said correlation value exceeds said threshold value is stored in a memory.

4. A method according to claim 3, wherein the detection process for correlation value is performed over several slots, the correlation values obtained in the slots are integrated to detect said correlation peak value, and, when the correlation value exceeds said threshold value in the first slot after starting the integration, the correlation value and the timing data corresponding to the correlation value are unconditionally stored in a new area on said memory.

5. A method according to claim 3, wherein the detection process for correlation value is performed over several slots, the correlation values obtained in the slots are integrated to detect said

correlation peak value, and, when the correlation value exceeds said threshold value in any of the second and the subsequent slots after starting the integration and the timing data on the timing at which the correlation value exceeds said threshold value coincides with the timing data already stored in said memory, integration is performed with the correlation value already stored in said memory and the result is stored in the same area.

6. A method according to claim 3, wherein the detection process for correlation value is performed over several slots, the correlation values obtained in the slots are integrated to detect said correlation peak value, and, when the correlation value exceeds said threshold value in any of the second and the subsequent slots after starting the integration and the timing data on the timing at which the correlation value exceeds said threshold value does not coincide with the timing data already stored in said memory, the correlation value and the timing data corresponding to the correlation value are stored in a new area on said memory,.

7. A method according to claim 1, wherein said threshold value can be arbitrarily set.

8. A method according to claim 4, wherein the number of times of integration can be arbitrarily set.

9. A communication synchronization apparatus with which a station detects a correlation value

between an input signal and a spreading code generated by the station itse~~lf, and~~ detects a correlation peak value in a predetermined unit of slots to detect a synchronization point of said input signal, said apparatus comprising

a comparison section for comparing the detected correlation value with a predetermined threshold value.

10. An apparatus according to claim 9, further comprising a first storage section for storing a correlation value exceeding said threshold value, obtained as a result of comparison by said comparison section.

11. An apparatus according to claim 10, further comprising a second storage section for storing timing data on the timing at which said correlation value exceeds the threshold value.

12. An apparatus according to claim 11, further comprising a correlation value integration section for performing the detection process for correlation value over several slots and integrating the correlation values obtained in the slots, wherein,

when the correlation value exceeds said threshold value in the first slot after starting the integration, the correlation value and the timing data corresponding to the correlation value are unconditionally stored in new areas of said first and second storage sections, and, when the correlation

value exceeds said threshold value in any of the second and the subsequent slots after starting the integration, if the timing data on the timing at which the correlation value exceeds said threshold value coincides with the timing data already stored in said second storage section, integration is performed with the correlation value already stored in said first storage section and the result is stored in the same area, and if the timing data on the timing at which the correlation value exceeds said threshold value does not coincide with the timing data already stored in said second storage section, the correlation value and the timing data corresponding to the correlation value are stored in new areas of said first and second storage sections.

13. An apparatus according to claim 11, wherein said first and second storage sections are provided in a single memory.

14. An apparatus according to claim 9, further comprising a register for arbitrarily setting said threshold value.

15. An apparatus according to claim 12, further comprising a register for arbitrarily setting the number of times of integration.

16. An apparatus according to claim 9, further comprising an end notification section for notifying the completion of the detection process for said correlation peak value when the detection process is

completed.

17. An apparatus according to claim 11, further comprising an overflow notification section for notifying a shortage of storage area in at least one of said first and second storage sections when it occurs.

18. An apparatus according to claim 9, further comprising a registration count notification section for notifying the number of correlation values stored in said first storage section.

19. An apparatus according to claim 12, wherein integration over several slots is started after activation of said apparatus.

20. A computer-readable storage medium for a communication synchronization apparatus with which a station detects a correlation value between an input signal and a spreading code generated by the station itself, and detects a correlation peak value in a predetermined unit of slots to detect a synchronization point of said input signal, said medium storing a program for causing a computer to realize a comparison function of comparing the detected correlation value with a predetermined threshold value.

21. A medium according to claim 20, further storing a program for causing said computer to realize a control function of controlling to store a correlation value exceeding said threshold value,

obtained as a result of comparison by said comparison function, in a memory.

22. A medium according to claim 21, further storing a program for causing said computer to realize a control function of controlling to store timing data on the timing at which said correlation value exceeds said threshold value, in a memory.

23. A cell search method wherein a station detects, each slot in a predetermined unit, a correlation value between an input signal and a spreading code generated by the station itself, the detection process for correlation value is performed over several slots, the correlation values obtained in the slots are integrated to detect a correlation peak value, and

the integration process is ended when the number of paths at which an integrated correlation value has reached a reference set value, reaches a path count set value.

24. A method according to claim 23, wherein comparison to check whether an integrated correlation value has reached said reference set value, is performed on the basis of power values.

25. A method according to claim 23, wherein comparison to check whether an integrated correlation value has reached said reference set value, is performed on the basis of voltage values.

26. A method according to claim 23, wherein said

reference set value can be arbitrarily set.

27. A method according to claim 23, wherein said path count set value can be arbitrarily set.

28. A cell search method wherein a station detects, each slot in a predetermined unit, a correlation value between an input signal and a spreading code generated by the station itself, the detection process for correlation value is performed over several slots, the correlation values obtained in the slots are integrated to detect a correlation peak value, and

said method has a first mode in which the integration process is ended when the number of paths at which an integrated correlation value has reached a reference set value, reaches a path count set value, and a second mode in which integration is performed a predetermined number of times.

29. A method according to claim 28, wherein said first and second modes can be arbitrarily selected and set.

30. A communication synchronization apparatus with which a station detects, each slot in a predetermined unit, a correlation value between an input signal and a spreading code generated by the station itself, the detection process for correlation value is performed over several slots, the correlation values obtained in the slots are integrated to detect a correlation peak value, and

thereby a synchronization point of said input signal is detected, said apparatus comprising

a comparison section for comparing a calculated integrated correlation value with a reference set value.

31. An apparatus according to claim 30, further comprising a count section for counting the number of paths at which an integrated correlation value has reached said reference set value, obtained as a result of comparison by said comparison section.

32. An apparatus according to claim 31, wherein integration is ended when the count by said count section reaches a path count set value.

33. An apparatus according to claim 30, further comprising a register for arbitrarily setting said reference set value.

34. An apparatus according to claim 30, further comprising an external terminal for arbitrarily setting said reference set value.

35. An apparatus according to claim 30, wherein comparison by said comparison section is performed on the basis of power values.

36. An apparatus according to claim 30, wherein comparison by said comparison section is performed on the basis of voltage values.

37. An apparatus according to claim 30, wherein said comparison section compares an integrated correlation value output from an adder for performing

integration, with said reference set value.

38. An apparatus according to claim 30, wherein said comparison section compares an integrated correlation value output from a memory for storing calculated integrated correlation values, with said reference set value.

39. An apparatus according to claim 32, further comprising a register for arbitrarily setting said path count set value.

40. An apparatus according to claim 32, further comprising an external terminal for arbitrarily setting said path count set value.

41. A communication synchronization apparatus with which a station detects, each slot in a predetermined unit, a correlation value between an input signal and a spreading code generated by the station itself, the detection process for correlation value is performed over several slots, the correlation values obtained in the slots are integrated to detect a correlation peak value, and thereby a synchronization point of said input signal is detected, said apparatus comprising

a comparison section for comparing the detected correlation value or a value output from a power conversion device for converting the correlation value into a power value, with a reference set value.

42. A communication synchronization apparatus with which a station detects, each slot in a predetermined unit, a

predetermined unit, a correlation value between an input signal and a spreading code generated by the station itself, the detection process for correlation value is performed over several slots, the correlation values obtained in the slots are integrated to detect a correlation peak value, and thereby a synchronization point of said input signal is detected, said apparatus having

a first mode in which integration is ended when the number of paths at which an integrated correlation value has reached a reference set value, reaches a path count set value, and a second mode in which integration is performed a predetermined number of times.

43. An apparatus according to claim 42, comprising a register for arbitrarily selecting and setting said first and second modes.

44. An apparatus according to claim 42, comprising an external terminal for arbitrarily selecting and setting said first and second modes.

45. A computer-readable storage medium for a cell search operation in which a station detects, each slot in a predetermined unit, a correlation value between an input signal and a spreading code generated by the station itself, the detection process for correlation value is performed over several slots, and the correlation values obtained in the slots are integrated to detect a correlation peak

value, said medium storing a program for causing a computer to realize a function of ending integration when the number of paths at which an integrated correlation value has reached a reference set value, reaches a path count set value.

46. A communication synchronization apparatus for performing a cell search operation in which a station detects a correlation value between an input signal and a spreading code generated by the station itself, and detects a correlation peak value in a predetermined unit of slots, said apparatus comprising

a dynamic RAM as a memory used in said cell search operation.

47. An apparatus according to claim 46, wherein said dynamic RAM is used as a memory for storing integration results in said cell search operation.

48. An apparatus according to claim 46, wherein data access occurs in said dynamic RAM within its refresh cycle.

49. A communication synchronization apparatus for performing a cell search operation in which a station detects, each of several slots in a predetermined unit, a correlation value between an input signal and a spreading code generated by the station itself, and the correlation values obtained in the slots are integrated to detect a correlation peak value, said apparatus comprising

a dynamic RAM as a memory used for storing the integration results of correlation values.

50. A communication synchronization apparatus for performing a cell search operation in which a station detects, each of several slots in a predetermined unit, a correlation value between an input signal and a spreading code generated by the station itself, and the correlation values obtained in the slots are integrated to detect a correlation peak value,

wherein a dynamic RAM is used as a memory in a correlator which detects correlation values in the slots in the manner of detecting the correlation value in each subunit obtained by dividing said spreading code, storing the correlation values in said memory, and outputting the sum of the correlation values of all subunits.

51. A portable terminal apparatus wherein a dynamic RAM is used as a memory in a portable telephone having at least a function of voice communication through a radio channel.

52. An apparatus according to claim 51, wherein data access occurs in said dynamic RAM within its refresh cycle.

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